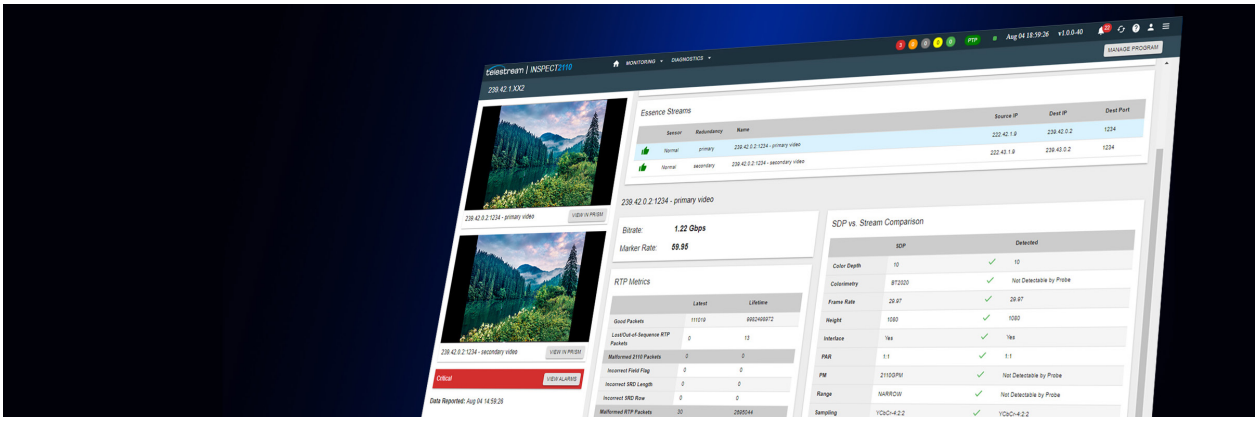


Inspect 2110

IP Video Monitoring for your ST 2110 Production Network

Ensure IP video production networks operate as expected with Inspect 2110 monitoring.

Introduction

Inspect 2110 monitors ST 2110 and mixed ST 2110 / ST 2022-6 IP video networks providing the automated visibility and diagnostics operations teams need. Broadcast production is changing from SDI to IP video bringing several benefits in flexibility, scale and efficiency. However that flexibility brings operational challenges to ensure the IP video network is working as expected.

Inspect 2110 features

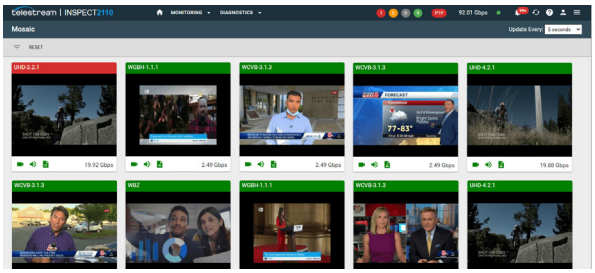
- Confirm video, audio and data essences are present, correct and compliant to all relevant standards
- Ensure redundant video streams are the same, healthy and syncronized
- Verify SDP files and essences match exactly
- View network traffic and identify QOS trends
- Detailed analysis on all essences in a program is just one click away with PRISM integration

JT-NM.ORG SMPTE ST 2110 SELF-TESTED 03 / 20 JT-NM.ORG

JT-NM.ORG NMOS TR-1001-1 SELF-TESTED 03 / 20 JT-NM.ORG

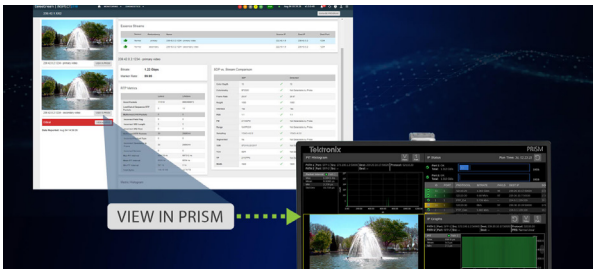
JT-NM Tested

telestream



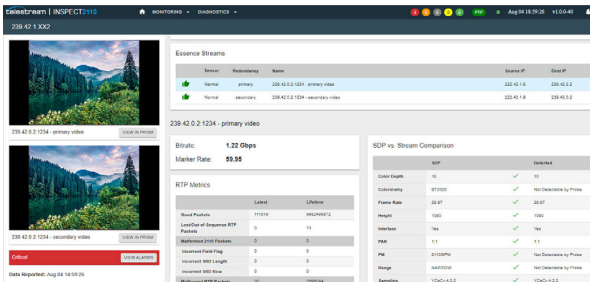
IP Video Monitoring

Inspect 2110 monitors ST 2110 and ST 2022-6 video streams across a production or contribution network to make sure they are present and healthy. A notification will be triggered if the format of the video, audio or data has errors or differs from the SDP file. Thumbnails provide visual feedback of the video quality, with status icons that include mouse-over alert messages and a direct link to diagnostics.



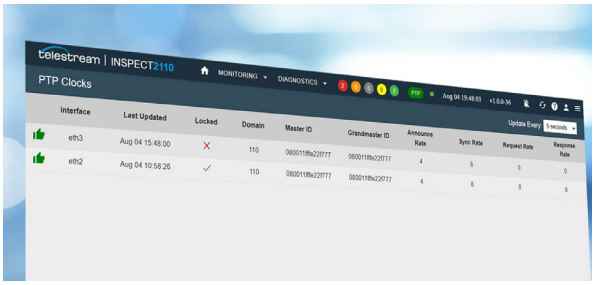
PRISM Connection for ST 2110 Analysis

Simplify operations of ST 2110 and ST 2022-6 video networks by combining Inspect 2110 monitoring with PRISM waveform monitor. Inspect 2110 provides scalable video network monitoring by exception and includes a 'click-to-view in PRISM' button to automatically launch any stream in PRISM for deep ST 2110 video waveform, audio, data and PTP analysis.



Redundancy and SDP File Checks

To help video operations, Inspect 2110 can compare the SDP file to the actual ST 2110 video streams running on the IP network. In addition, redundant video streams are compared, including ST 2022-7 support, to ensure both streams match and are operating as expected. Easily view redundant stream thumbnails and comparisons, and get alerts by exceptions of mismatch issues.

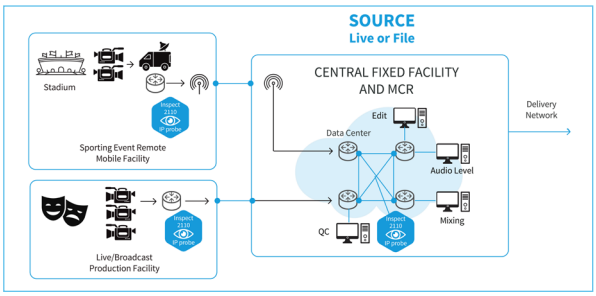


PTP Timing

PTP timing and synchronization is critical for IP video networking, and Inspect 2110 collects PTP performance metrics and confirms the video network is properly synchronized. Inspect 2110 simplifies automated detection of PTP issues and diagnostics, saving time and reducing errors.

High Performance

Inspect 2110 supports up to 100Gbps of monitoring capacity across dual 100G Ethernet interfaces. It uses a software container-based architecture for high performance and future cloud deployments. Developers will appreciate the API-first design for automation, and that the easy to use Inspect 2110 web UI uses the same API.



Content Integrity Monitoring

Inspect 2110 QoE monitors content quality. With video black screen and frozen frame detection and alerts, Inspect 2110 ensures there is no missing video data and the video source is working. Users can also ensure the audio quality by monitoring the audio levels for proper loudness and detecting audio silence.

Specifications:

Capacity
Monitor up to 100Gbps bandwidth across 1 or 2 40Gb/100Gb Ethernet ports

License
Program-count based licensing

Protocols
- ST2110-20
- ST2110-21
- ST2110-30
- ST2110-31
- ST2110-40
- ST2022-6 (no FEC)
- ST2022-7
- AMWA NMOS IS-04
- AMWA NMOS IS-05
- AMWA BCP 002-01

PTP Timing
- PTP v2
- ST 2059-1

Video format
- Resolution: SD, HD, Full HD, 4K UHD and 8K UHD
- Sampling: YCbCr-4:2:2 (for thumbnails & mosaic) 10-bit, 8-bit

Audio format
- PCM/ AES67
- AES3
- 48, 96 kHz
- 16-bit, 24-bit sample

Web UI
- Web-based user interfaces supported (version tested)
- Google Chrome (76.0.3809)
- Microsoft Edge (18.17763)
- Mozilla Firefox (68.2)

API
- REST API-first design
- Includes configuration, data metrics and thumbnails

Alerts
- Northbound alerts or SNMP interface for NMS/OSS integration
- Web Push API
- Web Sockets
- SNMP v3
- Amazon SNS

Appliances
- 1RU High Performance Servers
  - RS Appliance supports a maximum of 40 redundant video essences and unlimited audio/ ancillary
  - GS Appliance supports a maximum of 100 redundant video essences and unlimited audio/ ancillary
- Two monitoring ports, 100GbE/40GbE QSFP28
- Two management ports, 1GbE
- Dual Redundant Hot Plug Power Supply

www.telestream.net | info@telestream.net | tel +1 530 470 1300